

Call for papers and author guidelines

Practice examples on learning with geo-media in schools

We kindly invite you to contribute practice example on learning with geo-media to a book published by the digital-earth.eu network. This book will be targeted at teacher trainers, students in teacher training, teachers, and persons involved in curriculum development. The publishing house will probably be Springer.

The collection follows a broad idea of geo-media (GPS, digital maps, GI(S), georeferenced pictures, non-visualized geodata, geolocalized mobile devices applications, augmented reality), referring not only to geographical spaces, but also to social and virtual ones. (For further information on the general topic see the attached digital-earth.eu glossary.)

Each contribution shall present a very practical, ready-to-use, theoretically founded example for working with geo-media in school. Each contribution should not exceed 8 pages (detailed format guidelines will come as soon as possible) and should keep to the following coherent structure:

- title, names of authors, institution, and affiliations
- abstract
- aim, target standard, target group: link into pedagogical background
- description of the learning environment / case
- preparation for the teacher: materials (should be easy available, including links to online resources), teaching methods, process and duration, method of the student assessment
- experiences / test in real school use: conclusion, alternative tools, transferability
- short reference list of the sources cited in the contribution (max. 5 references)

The contributions should clearly refer to at least one of the following categories:

- technology – learn about technical necessities of recording geodata and publishing it with geo-media
- spatial thinking/science education – learn to use spatial analysis and construct hypotheses
- reflexive use – reflexive consumption of geo-media and of working with geo-media
- communication – communicate spatial visions with geo-media for participation and negotiation

General comments on geo-media and society, technical development of geo-media and educational benefits of geo-media are limited to the introductory chapters of the book and must not be repeated within the contributions on best practice examples.

Contributions should stick to the following criteria where applicable:

- follow the ideas of case-based learning, inquiry-based learning

- idea should be innovative and original
- must be in English language (including materials)
- teaching examples may be as short as one lesson up to a whole project
- need to include concepts of space and spatial representations, but may be cross-disciplinary
- should be platform-independent, using free platforms as example, focusing rather on concepts of learning with geo-media than on how to use a certain software
- technology should be user friendly and easy to use
- there is a clear added value of the usage of geo-media (“minds on instead if hands on”)
- need to be linked to pedagogy, to learning of complexity, and to constructivist approaches to learning, and may further collaborative, social, and game based learning
- are transferable to various contexts and levels of complexity

Deadlines: Contributions have to be handed in not later than the **October 8th 2012**.

There will be an internal review (Oct. 2012) by members of the digital-earth.eu network, with request for final versions in **January 2013**.

We are looking forward for your contribution!

For further information and in case of questions please email to: thomas.jekel@sbg.ac.at



GLOSSARY

This glossary has been developed by the digital-earth.eu COMENIUS network (2010-2013) in order to clarify terms frequently used in the discussion of geo-media in school education. Definitions are hold short and simple with the goal to meet teachers', teacher educators' and trainers' needs.

Digital earth

Digital earth was defined in 1998 by Al Gore as “[...] a concept [...] describing a virtual representation of the Earth that is spatially referenced and interconnected with the world’s digital knowledge archives”

Digital earth tools

Tools which allow to access and share geo-information. These are all sorts of geo-media or GIS software.

Geodata

Geodata is data including spatial aspects and components stored in a table or a database. Due to the spatial components the data can be georeferenced to a location on earth. Geodata is a resource for geoinformation.

Geoinformation

Abbreviation for geographic information. This can be data, text, images, videos etc. with a spatial component (location). Geoinformation is created by manipulating geodata and can be stored in a geo-database. Often, geoinformation and geodata are used synonymously.

Geo-media

Abbreviation for geographic media. Any form of media that incorporates or portrays geographical (location-based) information. This includes for example news, multimedia, telecommunications and social networks.

Georeferenced

Data or information with a spatial reference (geographic coordinates in different projections).

GIS

Abbreviation for Geographic Information System. Software to capture, process, analyse and visualise geodata in order to solve spatial problems.

SDI

Abbreviation for Spatial Data Infrastructure. National and international portals for geodata, metadata (=information about the data) and tools that are standardised and connected to each other.

Virtual globe

Digital 3D representation of the Earth, including the possibility to change the viewer's perspective and scale, and to share geoinformation.

Web 2.0

Dynamic internet concept that allows not only to use ("consume", Web 1.0) but also to add, collaborate and share ("produce") information in the cloud. Users are therefore often referred to as "prosumers". [Cloud computing: Data and tools stored at different virtual places (= in the cloud) and accessible via a network – the Internet - worldwide.]

Web-GIS

Website providing GIS functionality.